STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information
Center (STIC) detected errors when processing the following computer readable
form:

Application Serial Number: _10/542,937A_

Source: _1fwo_

Date Processed by STIC: _1/11/07_

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE
   APPLICANT, WITH A NOTICE TO COMPLY or,
2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A
   NOTICE TO COMPLY
FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT
MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER
VERSION 4.4.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND
TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:
       http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is
a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.
Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.
Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the
United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm> , EFS Submission
   User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):
   U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street,
   Alexandria, VA 22314

Revised 01/10/06

IFWO

RAW SEQUENCE LISTING   DATE: 01/11/2007
PATENT APPLICATION: US/10/542,937A   TIME: 09:39:07

Input Set : A:\U015859-4..ST25.txt
Output Set: N:\CRF4\01112007\J542937A.raw

**Does Not Comply
Corrected Diskette Needed**

```
 3 <110> APPLICANT: Mata Lopez, Pedro
 4         Mozas Alonso, Pilar
 5         Pocovi Mieras, Miguel
 6         Tejedor Hernandez, Diego
 7         Mallen Perez, Miguel
 8         Alonso Karlezi, Alberto
 9         Reyes Leal, Gilbert
10         Castillo Fernandez, Sergio
11         Martinez Martinez, Antonio
13 <120> TITLE OF INVENTION: Method and Device for detecting low density lipoprotein
receptor
14         gene mutations associated with familian hypercholesterolemia
16 <130> FILE REFERENCE: U015859-4
18 <140> CURRENT APPLICATION NUMBER: 10/542,937A
19 <141> CURRENT FILING DATE: 2005-07-21
21 <160> NUMBER OF SEQ ID NOS: 257
23 <170> SOFTWARE: PatentIn version 3.3
25 <210> SEQ ID NO: 1
26 <211> LENGTH: 60000
27 <212> TYPE: DNA
28 <213> ORGANISM: human
31 <220> FEATURE:
32 <221> NAME/KEY: gene
33 <222> LOCATION: (25998)..(26119)
34 <223> OTHER INFORMATION: rLDL
36 <220> FEATURE:
37 <221> NAME/KEY: CDS
38 <222> LOCATION: (25999)..(26121)
40 <220> FEATURE:
41 <221> NAME/KEY: misc_feature
42 <222> LOCATION: (35360)..(35361)
43 <223> OTHER INFORMATION: n is a, c, g, or t
45 <400> SEQUENCE: 1
46 aaaagatggt gtatccattc aatggaacat tatttggcct ttaaaaggaa ggaaattctc       60
48 actgagcata gtggtttatg cctgtaatcc cagcactttg ggaggctgag gcagggggga      120
50 gggggcggtt cacctgaggt caggagttca agaccagcct ggccaacatg gtgaaatccc      180
52 gtctctacta aaaatacaaa aaaattagcc gagtgtggtg gcacacacct gtaagccagg      240
54 ctacacggga gactgaggca ggagaatcgc tggaacccgg gaggcagagg ctgcagagag      300
56 ccgagattgc gtcactgcac tccagcctgg gtgacagagc gagactcttg tcttaaaaaa      360
58 aaaaagaagg aaggaaggaa ggaaggaagg aagttctgac acaggctcca acacagatgt      420
60 tatgctcagt gaaataagcc agacatgaaa ggacaaatac tgcctgatct cattcataag      480
62 aggtccctag aattgtagaa tggtgtgtgc cacgggctgg gagggggtgt ggccagagtt      540
64 tcagtttggg aagttgagaa tgttctggag atggatggcg gtagtggtgg ttgcacaact      600
66 gtgtgaatgc gcttaatgcc tctgaattgt gcagttacaa gtggttcgga tgggccgggc      660
```

```
 68 gcggtggctc atgcctgtaa tcccagcact ttgggaggcc gaggcaggtg gatcatgaga    720
 70 tcaggagatc gagaccatcc tggctaacac ggtgaaaccc catctctact aaaaaataca    780
 72 aaaaattagc caggcatggt ggtgggcacc tgtagtccca gctacttggg aggcggaggc    840
 74 aggagaatgg cgtgaacacg ggaggcagaa cttgcagtga gccgagatca cgccactgca    900
 76 ctccagcctg ggcgacagag tgagactccg tctaaaaaaa aaaagtggt taagatgggc    960
 78 cgggcatggg ggatcacgct tgcaatccca acactttggg aggctgaggt gggtgattac   1020
 80 gaggtcagga gttcgagacc agcctgacca ccatggtgaa accccgtctc tactaaaagt   1080
 82 acaaaattag ccgggtgtcg tggcacacgt ctgtaatccc agctactggg gaggctgagt   1140
 84 tgggaggatc acctgagccc agggaggtcc aggctgcagc aagccatgat tgcaccactg   1200
 86 cactccagcc tgggtgagag agtgagaccc tgtctccaaa caaacacaca tgaaaaacag   1260
 88 attttttttg ccaggtgcag tggctcacac ctgtaatccc agcactttgg gaggccaagg   1320
 90 cgggtggatc acgaggtcag gtgactgaga gcatcctggc taacacggtg aaaccctggc   1380
 92 tctactaaaa atacaaaaat ttagccgagc atggtggtgg gcacctgtag tcccagctac   1440
 94 tcgggaggct gaggcaggag aatggcatga acctgggagg cggagcttgc agtgagctga   1500
 96 gatcacgcca ctgcactcta gcctggggga cacagcaaaa ctgtctcaaa aaaaaaaaa   1560
 98 aaggtttttt taatttaaaa aggaaagaaa aggagagtgc tcgtgtggca ggcacctagc   1620
100 cctgtccagc gcaccctgag acagggatga tgtctcctcc ttgacctaag accacaagtt   1680
102 ctaaccaatt caaccgagga cagagcccca attccaggca gggcaatggg gtcgccttgt   1740
104 gaactaagat gcagatggag aagagcagac acagacacag gtcttggggc ccctgcaggg   1800
106 gtttctcact ggctttttcc ccctggattc ctatgggttc tggggaacag agttaggtcg   1860
108 gctggcaaga cagatgcatg aggctgtggc gcccttgaca ttgagccgga gggccagagt   1920
110 tcgtcattgc tgacgcagag aagctgggag ccaaggttag ccagatggtt tggaggagtt   1980
112 ttaaacaatc ttttctttc tttctctttc catctgtctg tccttctttc ctcccttcct   2040
114 gcccccttc ttttctcctt tctttccttc ctctctcctt cctccctttt tttctttttt   2100
116 tttggttttc tttttgtatt agtattatta tttttagac agggtcttgc tctgttgccc   2160
118 aggctggagg gcagtggcac gatcacagct cagtacaccc tcaaccttct gggttcaagc   2220
120 aatcctcctg ccttggcctc ccaggtagct gggactacag gcgtgtgcca ccacacctgg   2280
122 ttaattttt tttttttga cacggagtct tgctctgtca cccaggctgc agtgcagtgg   2340
124 cgtgatctcg gctcactgca acctccacct cccgggttca agcgatcctc ctgcctcagc   2400
126 ctcccgagta gctgggatta cacgcgcccg ccaccaagcc cggctaattt ttttattttt   2460
128 agtagagaca gagtttcacc acgttggcca ggctcgtctc aaactcctga cttagtgatc   2520
130 tacccacctt ggcctctcaa agtgctggga ttagaggcgt gagccaccat gcgcagccaa   2580
132 ttttgtatt tttagtagag atggggtttc accatgttgg tcagtctggt ctcgaactcc   2640
134 tgacctcaag tgatccacct gcctcagcct cccaaagtgc tggaattaca ggcatgagcc   2700
136 accgcgccca gccctcttaa ccattttaa gtgcacagtt cagcagcatt aagcacattc   2760
138 acattgttgt gcaaccatca gcccccgtcc atctccagct ttctcttttt ttttgtttgt   2820
140 tttgagacag ggtcttactc tctcgcccag tatagagtgc agtggtgcgg tcttggctcg   2880
142 ctgcaacctc tgccttccag gttcaagcta ttctcctgcc tcagtctccc cagtagctgg   2940
144 gattacagac acacatcacc acgccctgct aattatttg cattttagt agagatggtg   3000
146 tttcaccata ttggccaggc tgatcttgaa ctcctggcct caagtggtct gctccaaact   3060
148 gctgagatta cagccgtgag ccactgctcc cagccatctg caccttctc atcttcccaa   3120
150 atgtaactat gtccccgtga aacactcact ccccattcca cctccccagc ccctggcacc   3180
152 ccccatttta ttctggtgct aggggaattt caaaccaggc aagtctcaac acatgctcga   3240
154 gtgtaagaac cagcccacag cctcgttccc taatcacggt caaaccagaa ttctactcca   3300
156 ggttctactc tgtgaatctg ctttctgtga atctgttact ctggggaccg cctataagtt   3360
158 gaatcctaca gtgtctccac ttcagtgact ggcttatttc acttttctcc tctttattta   3420
160 tgagacaaaa tttcgctctt gttgctcagg ctggaatgca atggcgtgat ctcggctaat   3480
162 ttttttgtat ttttagtaga ggcggggttt caccatgttg gccaggctgg tctcgaactc   3540
164 ctgacctcag acgatccact ttggccttcc aaagtgctgg gattacaggc gcggcccacc   3600
```

Input Set : **A:\U015859-4..ST25.txt**
Output Set: **N:\CRF4\01112007\J542937A.raw**

```
166 tttctcctct taatcacaca ggtaatccat acatacgaca ttcttttttt tttttgacac 3660
168 ggagtcttac tctgtcacct aggctggagt gcagtggcgc aatcttggct cactgcaacc 3720
170 tctgcctccc aggatcaagc aattctcctg cctcagcctc ctgagtagct gggattacag 3780
172 gtaaccatca ccacacctgg ctaaattttg tatttttagt agagacgggg tttcaccacg 3840
174 ttggccacgc tggtattgaa ctcctggctt caagtgatct tcctgtctcg gtctcccgaa 3900
176 gtgctgggat tacaggaatg agccactgtg cccggccaat acgacatctg tgcaatgaag 3960
178 tgcaacatat aagacaccct tcccccaccc actgccccca ccaccgcccc cacgcccccc 4020
180 cccccatctc cagatcagaa cctggggctg tgcaatttta aacgttgtag ccacttgcta 4080
182 cttgggtagt tgaagttcag tctcagccag gttggagtcc tggactctgg cccctctttt 4140
184 attttattt tttatttttt tttgagacag agtctcgctc tgtcgcccag actggagcgc 4200
186 agtggtgcga tctcggctca ctgcaagctc tgcctcctga gttcacgcca ttcccccgcc 4260
188 tcagcctccc gagcagctgg gactacaggc gcccgccacc acaccggct aatttcttgt 4320
190 attttttagt agagatgggg tttcaccctg ttagccagga tggtctagat ttcctgacct 4380
192 tatgatccgc ctgcctcggg cctcccaaag tgctgggatg acaggagtga gccaccgcgc 4440
194 ccggcctctt tttttttttt tagacagtct ctgtcaccca ggctagagtg cgatggtgcg 4500
196 atctcggctc actgcaacct ccaccttccg ggttcaagcg attctcctgc ctcagcctcc 4560
198 tgagtatctg ggattacagg tgcctgtgac cacgcccggc tgattttgt attttttagta 4620
200 gagacggggt ttcaccacat tggtcaggct agcctcaaac tcctgacccc gtgatccttc 4680
202 cgcctcagcc tcccaaagtg ctgggattac aggactctgg cccatcttgg ctgctgccaa 4740
204 tgtccttcct tctatcttgg tttttccaca gttacgcaca tgccagataa cggcgagtct 4800
206 gttccccagc aactgcaacg gatctgccca ccactgggaa atggaagacc ttgcagccca 4860
208 ggtctttgta gaccaagatt agattgtggt caacaaacac ctgaccttgg cctttggaac 4920
210 catcagccat gtcagctaaa ataaaagcag aatctggctg ggcgcagtgg ctcacgcctg 4980'
212 taatcccagc actttgggggg ctgaggtgg gcagaccacc tgaggtccgg cgttctagac 5040
214 cagcctgacc aatatgatga aaccccgtct ctactaaaca tacaaaaatt agctgggcat 5100
216 ggtggcgggc acctgtaatc ccagctactc gggaggctga ggaaggagaa ttgcttgaac 5160
218 cctggaggca gaggttgcag tgagccgaga ttgcgccact gcactccaac ctggactgca 5220
220 gaacaagact ctgtcccaaa agcagataaa taaaaataaa taaaaataaa aatatggccg 5280
222 ggcatggtgg ctcacacctg taatcccaac actgggaaga tgaggcgggc agatcacgag 5340
224 gtcagggatt cgagaccagc ctggccaaca tggtgaaacc ccgtctctac taaaaataca 5400
226 aaaattagcc gggcatgatg ctgcatgcct gtaatcccag ctactctgga ggctgaggca 5460
228 ggagaatcgc ttcatcccgg gaggtggagc ttgcagtgag ctgagatcgc gccactgcac 5520
230 tctagcctgg gcaaaagagt gagactccat cgcaagaaaa aaaaaaaaaa aagctgcaag 5580
232 ctctgtctcc cgggttcaag tgattctcct gcctcagcct tccaagtagc taggattata 5640
234 cgcgcccgcc accatgcctg gctaattttt gtattttag tagagatgcg gtttcaccat 5700
236 gttggccagg ctggtctcaa actcctgacc tcacgtgatc cacctgcctc ggcctcccag 5760
238 agtgctggga ttacaggtgt gaacccctgc gcctggccaa gaaaagttgc ttgaatgaag 5820
240 agtaaataga agacccagaa agaaatgatt cgtccgagga aggtcacaga agcaacgtaa 5880
242 tcaagatgga aatctgactc ttcctaattt tggccagact tcccatccct ccaaagcttt 5940
244 ccagactctt ccagatcatt ctagatattt ccagaaatca ttcgtgaaat ctaactagga 6000
246 gtagtctgta aacaatgtgt ttcacacaga tacaattcat aaacgatgag aagacaagga 6060
248 cacttcatga atgaaatttt tacggccggg tatgttggct cacgcctata atcccaggac 6120
250 tttggaagac ccaggcagga ggattgcttg agtccaggag ttcaagacca gtctgggcca 6180
252 catagtgaga ccctgtcgct acaaaaaatt taaaaattag gtagatatgg tggtgtatgc 6240
254 ctctagtttt agcttttttg gaggctgaag caggaggatc tcttgagccc aggaggttga 6300
256 gctgcaatga gctacgattg aactactaca ctccagtctg ggtgacagag aaagaggctg 6360
258 cctcaaaaaa ataaaaataa aaaataagg ccggacgcgg tggctcacgc ctgtaatccc 6420
260 agcactttgg gaggctgggg tgggcagacc acgaggtcag gagatcgagg ccatcctggc 6480
262 caacatgatg aaaccctgtc tctactgaaa acacaaaat tagctgggcg tggtggcgta 6540
```

```
264 tacctgtaat cccagctact cgggaggctg aggcaggaga atcacttgaa ccagggagtc 6600
266 agaggttgca gcgagaggag attgtgccac tgcattccag cctggcaaca gagcaagact 6660
268 ccgtctcaaa aaagaaacaa caacagcaac aacaacaaaa aaaacataaa aaagttcggg 6720
270 cacggtggct cacacctgta atcccagcac tttgggaggc caaggtgggt agatctcttg 6780
272 aggtcaggag ttcaagacca gcctggccaa caaacatggt gaaaccccgt ctctactaaa 6840
274 aatacaaaaa gtagccgggt gtagtcccag ctactcggaa ggctgaggca ggagaatcgc 6900
276 ttcaacctgg gagatggaag ttgcagtgaa ctgagattgc gccactgggt gacagagtaa 6960
278 gactcttgtc tcaaaaaaaa aaaagaaag aaagtttaat ttaatgattc aaataatgac 7020
280 ctgctcgaga gataaatata aagtctaacg taagaggtgt atactttttc ctctgtcctg 7080
282 ctgtcctcgc cccacctcac cccaagtccc aacctgattg atcagtctcc tttccctctg 7140
284 gtagccccac tcccatgacc gaaccgagaa gtcatgcacc cgcataagaa ctctaatttt 7200
286 ttttttcaaa gtcttctcac tgccccaaaa atagtttctt tcattcccag gggatgtgaa 7260
288 agtgtctctc ccaattttat ttcaacctcc cagcgttcca cacatatgcc ttgcctcagc 7320
290 cagctttcac tgatctgcca tttccacctc ggcgctgctc ctacctgcgg aaatcctgtc 7380
292 catccatagt ctgatttctg ttgttccaga acattctttt tttttttcccc tggaacattc 7440
294 tttaagatac ctcaataaat gaaaccagag ggtatagagc agtatgaatg ggtactacaa 7500
296 tgtacagggg gaaatggagg ggaatatgat atactctcct ccttgtatat gcttagaatg 7560
298 ttctagaagg atatgcttaa aaggttagca gtcctggcca ggcgtggtgg ctcacgcctg 7620
300 taatctcagc actttgggat gccaacgcgg acggatcaca aggtcaggag ttctagatca 7680
302 gcctgaccaa tatagtgaaa cctcatcttt actaaaaata caaaaattag ccgggtacgg 7740
304 tggcatgtgc ctgtagtccc agctactttg gaacctgagg caggagaatc gcttgaactc 7800
306 gggaggcaga ggttgcagtg agccgagact gtgccattgc actgcagcct gggtgacaga 7860
308 acaggactcc gtctcaaaaa aaaacaaaaa aggtcagcag tcttaattgt cagagggcag 7920
310 gggacctgca tgggatggag gttttttccat gtgtccacct tttgagccct tttgctttttt 7980
312 ttttttaaat cttttttattg tagcaaaata gatataaaat ttacccttttt ttttttttgag 8040
314 acagggtctc actctgttgc ccaggttgga gtgcagtggc atgatcttgg ctcactgcag 8100
316 cctctgcctc ctgggttcaa gcgattttcc tgcctcagcc tcccgagtag ctgggattac 8160
318 aggtgcttgc caccataccc ggctaatttt gtatttttag tagagacggg gttacgccaa 8220
320 gttggccaag ctggtcgcaa actcctgacc tcaagtgatc cgccccctc ggcctcccaa 8280
322 agtgctggga ttacaggcag gagccaccac gctcagccct aaaatttacc atattaacca 8340
324 ttttcaagtt cagaggcatt aaagtatact cacattgttg ttcaactgtc accactactc 8400
326 acctgcagaa gtttttcatc ttgcaaagtg aaaaccccat acccaatttc ccgttcttcc 8460
328 tctcagcccc tggtaatcac tattctactt tttgtctact ttttgtatga atttgcctat 8520
330 tctaggacct aatagaagtg gagtcaaacc tgtttgtcct tttgtggctg.gcttatttca 8580
332 cccggcctta tatcctcaag gtttatccat gttggaggat gcctgaattt ccttgttttt 8640
334 aaggctaaat tttattctat tatattaata tgtcatattt tgtttatcct gatggacact 8700
336 tgggttgatt ccacctttgg ccattttgaa gaagcttcta tgtacatggt atacacatat 8760
338 atctttgggt ctctgctttc aatgcttttg gggatatttc agatgtggaa tttctggatt 8820
340 ataaggcaat ttttttttt gagacagact ctcgctcttg tcgcccaggc tagaatgtgg 8880
342 tggtgtgatc tattttttt ttttttttga gatggagtct cgctctgtcg cccaggctgg 8940
344 agtgcagtgt cacgatctca gctcactgca agctccgcct cccaggttcg tgccattctt 9000
346 atgcctcagc ctcccaagta gctgggacca cagccgccca ccacctcacc cggctaattt 9060
348 ttgtattttt agtagagaca gggtttcact atgttggcca ggatggtctc gatctcctga 9120
350 cctcgtgatc cgcctgcctc ggcctcccaa agtgctggga ttacaggcgt gagccactgc 9180
352 acccggctgg tgtgatcttg gctcgctgca acctctgcct cccaggttca agcgattctt 9240
354 gtgcctcagc ctctccgcag ctgggactac aggtgtgcgc cactgtgccc agctactttt 9300
356 taaaaatata tgtgtattta ttatactttt aagttctggg atacatgtac agaacgtgca 9360
358 ggtttgttac ataggtatac atgtgccatg gtggtttgct gcaccatca accggtcatc 9420
360 tacattaggt atttctccta atgctatccc ttccctagcc ctccactctc ccggtttttt 9480
```

```
362 gttttgtttt gttttgttgt tttgttttta gtagagacag ggtctcacca tgttgcccag  9540
364 gctagtcttg aactcctgac ctcaagtgat ccgcccacct cagcctccca aagtgctggg  9600
366 attacaggtg tgacccacta cactcggcct tattttcact tatttatgca attttcacta  9660
368 ttgctatatt ctaggaggca ctgtggaatt gcactgtgga attttagtat tgctgtattt  9720
370 cagcaagcca tgaggtctgt cagcacacgg ctttgggcat tttgtgaaga taactgatgc  9780
372 cagctgagcc aaggcaggtt cctgattcca cccactggca ggcaccgagg tctctgctgt  9840
374 tactgatggt ttctctgtgg attgatgggc ttaaggccag accacagctg caatggctca  9900
376 cctctgccaa aggccaggct cgttggggca gagacctatt ccggactgag cctcctggtg  9960
378 aattagagag gtagaaaatg ggaggacggg ggcaggtggg ctattacagc gaggaaaatg 10020
380 cccaccctga gttgtattag ataactttgg gagttcagga actttccaat aaagtgggtt 10080
382 ccacagcagg attacttact gactccctaa tagaaagaag gcaggcacag gccgggcgtg 10140
384 ttggctcatg tctgtaatcc cagcacgttg ggaggctgag gcgggtggat cacaaggtca 10200
386 ggagatccag accatcctgg ctaacaaagt gaaaccccgt ctctactaaa aatacaaaaa 10260
388 attaggctgg gcgtggtggc tcgtgcctgt aatcccagca ctttgggagg ctgaggcggg 10320
390 cggatcacga ggtcaggaga tcgagaccgt cctggctaac acggtaaaac cccatctcta 10380
392 ctaaacatac aaaaaaaaat tagccaggtg tggtggcggg cgcctgtagt cccagctact 10440
394 caggaggctg aggcaggaga gtggtgtgaa ctcgggaggc gcagcttgca gtgagccgag 10500
396 actgcgccac tgcactccag cctgggcaac agacagagac tccgtctcaa aaaaaaaaa 10560
398 aaaaaataca aaaattagc caggcgtggt ggcacgtgca cgtgactgta gtcccagcta 10620
400 cttgggaggc tgaggcagga gaattgtttg aacccgggag acggaggttg cagtgagccg 10680
402 agatcgcgcc actgcactcc agcctgggtg acagagctag actccgtcaa aaaacaaaaa 10740
404 acaaaaaaca aaaaacaaa aaaaaaaaaa cagcaggaac tggcaggtct ccctgaaga 10800
406 gataaaaaaa aaaaatgca gttgcaacac aaaagcagcc acagagaaaa gcaaacccat 10860
408 atatggtatt tattatgcac cgagtgtggc tctaatcact ttttttttt taattgagag 10920
410 acagcctggc tctgttgatt gggctggagt gcagtggcgc gaccgtagct cattgcagcc 10980
412 tcaacctcct tggctcaagc aatcctccta cctcagcctc ctgagtagct gggaccacag 11040
414 gtgtgagcca ccacgcctgg ctaattgttt ttttttttt tgtagagaca gggtctcact 11100
416 atgtggccca ggctggtttc caactcctgg gctcaagtga tcctcccacc tctgcctccc 11160
418 aaagtgctgg ggattacagg catgagccac ctcgcctggc ctctagtcgc tttatatatt 11220
420 ttaacttaat ccttacaaga gccctgtgag ctagttacag gagcacaaat ggaaaccaag 11280
422 aaacagaaaa atttatcagc atgactcagt cctcagagcc atgtatggcc gtgtccgtgc 11340
424 atggcaggca ggtcaggggc ctggggaacg ctgttctgga aaccttggcc aggccttggc 11400
426 acccgaggaa tgtgcttttc agagttttg tggctctttt ccagacctgc cctgacctct 11460
428 agctctggga actatgtaag ccaagtgcct tccgggaagg gagtccctct cctggtaact 11520
430 ctttctgggt aaccagatgt ggactcatga cacacactga gcctacgtct tataattttt 11580
432 tgttttttgtt tttgagacag tttcggtctt cttgcccagg ctggagtgca atggtgcgat 11640
434 ctcggctcac tgcaacctct gcctcccagg ttcaagcgat tctcctgcct cagcctccct 11700
436 agtagctgga attgcaggca tgcgccacca cgcctggcta attttttgta ttttttttt 11760
438 tttagtagaa acggggtttc accttgttag ccaggctggt caccaactcc tgacctcagg 11820
440 tgatccgccc acctctgcct cccaaagtgc tgggattaca ggtgtgagac agctgtgagc 11880
442 caccacgccc ggcgcatttt ttttttcttt tttttcagag ggagtgtccc tctgtcaccc 11940
444 aggctgaagt gtagtggcgt gatctcggcc cactgtaacc tctatctccc aggttcaagt 12000
446 gattctcctg actcagcctc ccaagtagct gggactacag gcgcctgcta ccatgcctgg 12060
448 ctaatttttg tagttttagt agaaccgggt tttgccatg ttggccaggc tggtctcaaa 12120
450 ctcttgactt caggtgatcc acctgccttg gcttctgaa gtgctgggat tataggcat 12180
452 gagccactgt gactggccat cttaaatttt ttttttttt ttttttttt ttgagacagg 12240
454 gtttcactct gtcgcccagg ctggagtgca aaggcgcgat cttggttcac tgcaagctcc 12300
456 gcctcctggg ttcatgccat tctcctgcct ctgcctcatg agtaactgag actacaggcg 12360
458 cccaccacca cgcccggcta atttttttgt atttttttag tagagatggg gtttcacctt 12420
```

```
<210>   5
<211>   24
<212>   DNA
<213>   artificialsequence

<400>   5
cacattgaaa tgctgtaaat gacg                                              24
```

Artificial Sequence
this needs explanation in <220>-<223> section
(see p. 7)

```
<210>   6
<211>   24
<212>   DNA
<213>   artificialsequence

<400>   6
ctattctggc gcctggagca agcc                                              24
```

same errors
in Seqs 6-257

```
<210>   7
<211>   24
<212>   DNA
<213>   artificialsequence

<400>   7
ttgagagacc ctttctcctt ttcc                                              24
```

this page
shown as a
sample of errors

```
<210>   8
<211>   20
<212>   DNA
<213>   artificialsequence

<400>   8
gcatatcatg cccaaagggg                                                   20


<210>   9
<211>   24
<212>   DNA
<213>   artificialsequence

<400>   9
ttcctttgag tgacagttca atcc                                              24


<210>   10
<211>   24
<212>   DNA
<213>   artificialsequence

<400>   10
gataggctca atagcaaagg cagg                                              24


<210>   11
<211>   24
<212>   DNA
```

RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 01/11/2007
PATENT APPLICATION: US/10/542,937A   TIME: 09:39:08

        Input Set : A:\U015859-4..ST25.txt
        Output Set: N:\CRF4\01112007\J542937A.raw

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 35360,35361

Use of <220> Feature(NEW RULES):   *error explanation*
Sequence(s)__are missing the <220> Feature and associated headings.
Use of <220> to <223> is **MANDATORY** if <213> ORGANISM is "Artificial Sequence"
or"Unknown". Please explain source of genetic material in <220> to <223>
section (See "Federal Register," 6/01/98, Vol. 63, No. 104,pp.29631-32)
(Sec.1.823 of new Rules)

Seq#:5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30
Seq#:31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54
Seq#:55,56,57,58,59,60,61,62,63,64,65,66,67,68,69,70,71,72,73,74,75,76,77,78
Seq#:79,80,81,82,83,84,85,86,87,88,89,90,91,92,93,94,95,96,97,98,99,100,101
Seq#:102,103,104,105,106,107,108,109,110,111,112,113,114,115,116,117,118,119
Seq#:120,121,122,123,124,125,126,127,128,129,130,131,132,133,134,135,136,137
Seq#:138,139,140,141,142,143,144,145,146,147,148,149,150,151,152,153,154,155
Seq#:156,157,158,159,160,161,162,163,164,165,166,167,168,169,170,171,172,173
Seq#:174,175,176,177,178,179,180,181,182,183,184,185,186,187,188,189,190,191
Seq#:192,193,194,195,196,197,198,199,200,201,202,203,204,205,206,207,208,209
Seq#:210,211,212,213,214,215,216,217,218,219,220,221,222,223,224,225,226,227
Seq#:228,229,230,231,232,233,234,235,236,237,238,239,240,241,242,243,244,245
Seq#:246,247,248,249,250,251,252,253,254,255,256,257

Artificial Sequence

```
<210>   251
<211>   25
<212>   DNA
<213>   artificialsequence)
```

delete ;

```
ctccccatcggtaagcgcgggccgg

<twofivethree;DNA;artificialsequence
```

delete this

```
<400>   251
ctccccatcg gtcagcgcgg gccgg                                    25
```

<210> 163
<211> 21
<212> DNA
<213> artificialseqeunce

Artificial Sequence

<400> 163
ccgtcggggg cctggatgtc t   21

VERIFICATION SUMMARY   DATE: 01/11/2007
PATENT APPLICATION: **US/10/542,937A**   TIME: 09:39:08

Input Set : **A:\U015859-4..ST25.txt**
Output Set: **N:\CRF4\01112007\J542937A.raw**

```
L:1230 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:35301
L:2097 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:5, <213>
ORGANISM:artificialsequence
L:2097 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:5, <213>
ORGANISM:artificialsequence
L:2097 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:5,Line#:2097
L:2106 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:6, <213>
ORGANISM:artificialsequence
L:2106 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:6, <213>
ORGANISM:artificialsequence
L:2106 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:6,Line#:2106
L:2115 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:7, <213>
ORGANISM:artificialsequence
L:2115 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:7, <213>
ORGANISM:artificialsequence
L:2115 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:7,Line#:2115
L:2124 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:8, <213>
ORGANISM:artificialsequence
L:2124 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:8, <213>
ORGANISM:artificialsequence
L:2124 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:8,Line#:2124
L:2133 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:9, <213>
ORGANISM:artificialsequence
L:2133 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:9, <213>
ORGANISM:artificialsequence
L:2133 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:9,Line#:2133
L:2142 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:10, <213>
ORGANISM:artificialsequence
L:2142 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:10, <213>
ORGANISM:artificialsequence
L:2142 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:10,Line#:2142
L:2151 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:11, <213>
ORGANISM:artificialsequence
L:2151 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:11, <213>
ORGANISM:artificialsequence
L:2151 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:11,Line#:2151
L:2160 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:12, <213>
ORGANISM:artificialsequence
L:2160 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:12, <213>
ORGANISM:artificialsequence
L:2160 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:12,Line#:2160
L:2169 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:13, <213>
ORGANISM:artificialsequence
L:2169 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:13, <213>
ORGANISM:artificialsequence
L:2169 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:13,Line#:2169
L:2178 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:14, <213>
ORGANISM:artificialsequence
L:2178 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:14, <213>
ORGANISM:artificialsequence
L:2178 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:14,Line#:2178
L:2187 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:15, <213>
ORGANISM:artificialsequence
```

```
L:2187 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:15, <213>
ORGANISM:artificialsequence
L:2187 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:15,Line#:2187
L:2196 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:16, <213>
ORGANISM:artificialsequence
L:2196 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:16, <213>
ORGANISM:artificialsequence
L:2196 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:16,Line#:2196
L:2205 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:17, <213>
ORGANISM:artificialsequence
L:2205 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:17, <213>
ORGANISM:artificialsequence
L:2205 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:17,Line#:2205
L:2214 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:18, <213>
ORGANISM:artificialsequence
L:2214 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:18, <213>
ORGANISM:artificialsequence
L:2214 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:18,Line#:2214
L:2223 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:19, <213>
ORGANISM:artificialsequence
L:2223 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:19, <213>
ORGANISM:artificialsequence
L:2223 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:19,Line#:2223
L:2232 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:20, <213>
ORGANISM:artificialsequence
L:2232 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:20, <213>
ORGANISM:artificialsequence
```

12

L:2232 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:20,Line#:2232
L:2241 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:21, <213>
ORGANISM:artificialsequence
L:2241 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:21, <213>
ORGANISM:artificialsequence
L:3517 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:163
L:4311 M:259 W: Allowed number of lines exceeded, <213> ORGANISM:
L:4313 M:259 W:. Allowed number of lines exceeded, <213> ORGANISM: